## CLAIMS

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A remote feeder reactance coil for supplying energy to, or withdrawing energy from, signal transmission lines, comprising a primary winding (102;202) of an electrically conductive material which carries the feed current, as well as an attenuation circuit (118;218)

characterized in that

said attentuation circuit (118;218) includes a secondary winding (112;212) of e.g. an electrically insulated conductive material, wherein said secondary winding (112;212) and said primary winding (102;202) interact with each other through capacitive and/or inductive coupling.

- 2. The remote feeder reactance coil of claim 1 characterized in that said primary and said secondary winding (102;112; 202;212) have substantially parallel winding axes, in particular one common winding axis.
- The remote feeder reactance coil of claim 2 characterized in that the turns (114) of said secondary winding (112) extend between the turns (110) of said primary winding (102).
- 4. The remote feeder reactance coil of claim 2 characterized in that the turns (214) of said secondary winding (212) are wound within the turns of said primary winding, below the latter, or outside and on the turns (210) of said primary winding (202).
- 5. The remote feeder reactance coil of one of claims 1 to 4 characterized in that said conductive material of said

secondary winding (112;212) is a material with an ohmic resistance.

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The remote feeder reactance coil of one of claims 1 to 5 characterized in that said attenuation circuit (118;218) includes e.g. an ohmic resistor (116;216) for connecting the terminals of said secondary winding (112;212).

- 7. The remote feeder reactance coil of one of claims 1 to 5 characterized in that said attenuation circuit includes a foil or a layer of conductive varnish with an ohmic resistance for connecting the terminals of said secondary winding.
- 8. The remote feeder reactance coil of one of claims 1 to 5 characterized in that said attenuation circuit includes an arrangement of at least one ohmic resistor and one further reactive element for connecting the terminals of said secondary winding.
- 9. The remote feeder reactance coil of one of claims 1 to 8 characterized in that said attenuation circuit (218) includes a terminal which is electrically connected to said primary winding (202).
  - 10. The remote feeder reactance coil of one of claims 1 to 9 characterized in that said primary winding (102;202) and/or said secondary winding (112;212) at least consist of one insulated wire.
  - 11. The remote feeder reactance coil of one of claims 1 to 10 characterized in that said primary winding (102;202) is spirally wound up onto a core (106;206) or a tubular body (104;204).
  - 12. The remote feeder reactance coil of claim 11 characterized in that said tubular body (104;204) is of an electrically

insulating material and encompasses a core (106;206) of ferromagnetic material.

Sub 13.

A signal transmission system with signal transmission lines, whose intermediate amplifiers (16) are supplied with electrical energy via said signal transmission lines (14), with remote feeder reactance coils (18,20) used for this purpose being of the type as claimed in one of claims 1 to

